

IN THE CLAIMS:

The text of all pending claims is set forth below. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD new claim 8 and AMEND claims 1 and 4 in accordance with the following:

1. (CURRENTLY AMENDED) A method for representing the configuration of~~configuring~~ an electrical system, comprising:

generating and displaying configured function blocks of the electrical system as a first set of representations;

generating and displaying configured objects as a second set of representations corresponding to the configured function blocks;

creating communication variables in the second representation associated with the configured function blocks;

assigning at least one of the communication variables to at least one of the configured objects;

converting information formed by said creating and assigning to associate with at least one of the function blocks, a first document formulated in a page description language and containing first references to corresponding configured objects, and to associate with at least one of the configured objects, a second document formulated in the page description language and containing second references to corresponding function blocks; and

displaying the first and second documents.

2. (ORIGINAL) A method according to claim 1, further comprising providing navigation between the first and second set of representations of the function blocks via the first and second references.

3. (ORIGINAL) A method according to claim 1, further comprising changing at least one of the first and second references if the information about at least one of the configured function blocks and configured objects changes.

4. (CURRENTLY AMENDED) A method for representing the configuration of~~configuring~~

an electrical system, comprising:

- generating a graph from sets of representations of node function blocks and connection function blocks of the electrical system, the graph having only nodes corresponding to the node function blocks and references to the nodes; and
- displaying the graph.

5. (ORIGINAL) A method according to claim 4, further comprising providing navigation via the representations of the connection function blocks in response to user selection of the references.

6. (ORIGINAL) A method according to claim 5, further comprising repeating said generating to produce a new graph if information about interconnection of the node function blocks changes.

7. (ORIGINAL) A method according to claim 5, wherein said generating places the references on the graph in relation to connections actually present, whereby a measure of configuration progress can be derived therefrom.

8. (NEW) A computer-readable medium encoded with a computer program that when executed by a processor controls the processor to perform a method, comprising:

- configuring function blocks;
- configuring objects associated with the configured function blocks and mapping the configured objects to respective function blocks via communication variables; and
- generating a first document referring to configured objects and a second document referring to function blocks using the mapping.